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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,635	03/31/2005	Takatsugu Funawatari	268744US6PCT	1373

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C. IRVIN MCCLELLAND  
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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KLIMOWICZ, WILLIAM JOSEPH

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/529,635

**Applicant(s)**

FUNAWATARI ET AL.

**Examiner**

William J. Klimowicz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-9 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

Claim 1 is objected to because of the following informalities:

With regard to claim 1 (line 5), the word “fist” should be changed to the word --first--.

With regard to claim 8, the phrase “wherein on the assumption” should be worded in a more affirmative nature, consistent with United States Patent Office claim language (i.e., positive recitations, if the language recited subsequent thereto is to be given positive structural weight).

Claims 3, 5 and 9 are objected to because of the following informalities and appropriate correction is required.

The following phrase(s) lack clear antecedent basis within the claim(s), i.e., either the particularly recited passage fails to be properly introduced prior to its appearance at that point in the claim or the structure recited in the passage is not an inherent part of or component of the previously recited structure. The lack of antecedence as noted *infra*, is merely formal, since the claims can be understood in light of the instant specification and drawings; the antecedence informalities delineated below do not rise to the level of a rejection under 35 USC 112 2<sup>nd</sup> paragraph:

- (i) Claim 3 (line 6), the phrase “the locking member.”
- (i) Claim 5 (line 1 and line 3), the phrase “the locking member.”
- (i) Claim 9 (line 1), the phrase “the locking member.”

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue (US 6,590,858 B2).

As per claim 1, discloses a disk cartridge (10), comprising: a cartridge body (12) including a lower shell (15) having formed therein a first opening (25) for write and/or read and an upper shell (13) butt-joined to the lower shell (15); a rotation wheel (14) housed rotatably in the cartridge body (12) and which houses a disk (11) and has formed therein a second opening (42) corresponding to the first opening (25) and through which the housed disk (11) is exposed to outside; and a shutter mechanism (18) provided between the lower shell (15) and rotation wheel (14) and which operates with the rotation of the rotation wheel (14) to uncover the first (25) and second (42) openings when the latter are coincide with each other; and a locking mechanism (32) including a shaft portion (35) installed pivotably to any one of the shells (13, 15), a locking portion (32) engaged in an engagement concavity (44b) in the rotation wheel (14) to lock the rotation wheel (14) in a position where the shutter mechanism (18) covers the first opening (25), and an unlocking portion (44a) which cancels the engagement of the locking portion (32) in the engagement concavity (44b), the cartridge body (12) having formed therein an insertion guide recess (31) open at the side of the cartridge body (12), at which the latter is

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first inserted into a disk recorder and/or player (60); and the locking portion (32) having an unlocking piece (37) which is opposite to the insertion guide recess (31).

As per claim 2, wherein the engagement concavity (44b) in the rotation wheel (14) is formed inside the peripheral edge of the rotation wheel (14).

As per claim 6, wherein the insertion guide recess (31) has a limiting portion an unlocking pin (72) included in the disk recorder and/or player abuts and has formed therein a relief hole (recess into which (37) pivots) in which the unlocking piece (37) pressed by the unlocking pin will retreat.

As per claim 7, wherein the insertion guide recess (31) is formed wider at the open end thereof - due to the frontal curvature of the front of the cartridge, which effectively expands the opening (31).

As per claim 8, wherein on the *assumption* that the unlocking pin of the disk recorder and/or player has a width  $W_1$  and the insertion guide recess has a width  $W_2$ ,  $W_1 \geq W_1/2$ . Note that the recited formula  $W_1 \geq W_1/2$  always holds true. Take any number, divide it by two, and the original number is greater than or equal to itself divided by two.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (US 6,590,858 B2).

See the description of Inoue (US 6,590,858 B2), *supra*.

As per claim 5, Inoue (US 6,590,858 B2) discloses wherein the locking member (32) is supported pivotably on a shaft (35) formed on a shell, Inoue (US 6,590,858 B2) remains silent with respect to wherein the shaft is formed expressly on the lower shell and wherein the shaft is formed higher than the locking member.

At the time the invention was made, it would have been to a person of ordinary skill in the art to provide the shaft (35) of Inoue (US 6,590,858 B2) as being formed on the lower shell, wherein the height thereof is greater than the locking member (32). Applicant has not disclosed that providing the shaft of expressly the “lower” shell and providing the height of the shaft and being greater than the height of the locking member provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the disk cartridge structure as disclosed by Inoue (US 6,590,858 B2) because providing the shaft of the lower shell with a height greater than the locking member (32) provides no unobvious benefit; save, for example, facilitating the assembly of the locking member to the shell; the greater the height of the shaft, the less chance the locking member, when assembled to the shaft, will come free.

Therefore, it would have been obvious to one of ordinary skill in the pertinent art to modify Inoue (US 6,590,858 B2) to obtain the invention as specified in claim 5.

As has been widely held, to support a conclusion that a claim is directed to obvious subject matter, prior art references must suggest expressly or impliedly the claimed invention *or*

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an Examiner must present a “convincing line of reasoning” as to why one of ordinary skill in the art would have found the claimed invention to have been obvious. *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). In doing so, the Examiner may rely on “logic or scientific principle.” *In re Soli*, 317 F.2d 941, 947, 137 USPQ 797, 801 (CCPA 1963). See also M.P.E.P. §2144.02.

As set forth *supra*, the Examiner has asserted that no advantage, particular purpose, or solution to a problem was disclosed. The Examiner also has explained the reasoning used to determine that the prior art would have performed equally as well as the claimed invention. These two steps help present the aforementioned “convincing line of reasoning.” *Clapp*, 227 USPQ at 973.

As per claim 9, although Inoue (US 6,590,858 B2) remains silent to the composition of the locking member (32), (i.e., “wherein the locking member is formed from a resin superior in sliding performance”), Official notice is taken disk cartridges of the type disclosed by Inoue (US 6,590,858 B2) that have resin components which are superior in sliding performance (such as “Teflon,” polyethylene, etc., ad nauseam) are notoriously old and well known and ubiquitous in the art; such Officially noticed fact being capable of instant and unquestionable demonstration as being well-known.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the locking member (32) of Inoue (US 6,590,858 B2) as being of a conventional resin, having superb sliding characteristics.

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The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the locking member (32) of Inoue (US 6,590,858 B2) as being of a conventional resin, having superb sliding characteristics in order to minimize friction and abrasive wear, as is well known, established and appreciated in the art.

### ***Allowable Subject Matter***

Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

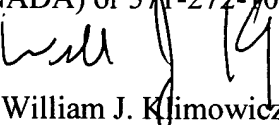
Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (571) 272-7577. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
William J. Klimowicz  
Primary Examiner  
Art Unit 2627

WJK